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July 27, 2017

### **VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd Chief Clerk/Administrator Public Service Commission of South Carolina 101 Executive Center Drive, Suite 100 Columbia, South Carolina 29210

Re: Duke Energy Progress, LLC – Monthly Fuel Report Docket No. 2006-176-E

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of June 2017.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

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Sincerely,

Rebecca J. Dulin

Enclosure

cc: Service List

### Duke Energy Progress Summary of Monthly Fuel Report

Schedule 1

Line No.	Item	June 2017
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 140,661,908
	MWH sales:	
2	Total System Sales	5,541,197
3	Less intersystem sales	328,032
4	Total sales less intersystem sales	 5,213,165
5	Total fuel and fuel-related costs (¢/KWH)	2.6982
	(Line 1/Line 4)	
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)	 2.3634
	Generation Mix (MWH):	
	Fossil (By Primary Fuel Type):	
7	Coal	823,759
8	Oil	6,501
9	Natural Gas - Combustion Turbine	111,541
10	Natural Gas - Combined Cycle	1,711,497
11	Total Fossil	2,653,297
12	Nuclear	2,551,567
13	Hydro - Conventional	46,026
14	Solar Distributed Generation	24,661
15	Total MWH generation	 5,275,551

Note: Detail amounts may not add to totals shown due to rounding.

# Duke Energy Progress Details of Fuel and Fuel-Related Costs

Description		June 2017
Fuel and Fuel-Related Costs:		
Steam Generation - Account 501		
0501110 coal consumed - steam		30,947,065
0501310 fuel oil consumed - steam		898,183
Total Steam Generation - Account 501		31,845,248
Nuclear Generation - Account 518		
0518100 burnup of owned fuel		17,642,650
0518600 - Disposal Cost		-
Total Nuclear Generation - Account 518		17,642,650
Other Generation - Account 547		
0547000 natural gas consumed - Combustion Turbine		5,368,234
0547000 natural gas consumed - Combined Cycle		49,496,289
0547200 fuel oil consumed		310,792
Total Other Generation - Account 547		55,175,315
Purchased Power and Net Interchange - Account 555		
Fuel and fuel-related component of purchased power		34,073,481
Fuel and fuel-related component of DERP purchases		2,210
PURPA purchased power capacity		8,198,063
DERP purchased power capacity		463
Total Purchased Power and Net Interchange - Account 555		42,274,217
Less fuel and fuel-related costs recovered through intersystem sales - Account 447		7,408,304
Total Costs Included in Base Fuel Component	\$	139,529,126
Environmental Costs		
0509030, 0509212, 0557451 emission allowance expense	\$	3,530
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense		1,342,906
Emission Allowance Gains		(180,500)
Less reagents expense recovered through intersystem sales - Account 447		21,772
Less emissions expense recovered through intersystem sales - Account 447		11,382
Total Costs Included in Environmental Component		1,132,782
Fuel and Fuel-related Costs excluding DERP incremental costs	<b>\$</b>	140,661,908
DERP Incremental Costs		155,679
Total Fuel and Fuel-related Costs	\$	140,817,587

Notes: Detail amounts may not add to totals shown due to rounding.

## DUKE ENERGY PROGRESS PURCHASED POWER AND INTERCHANGE SOUTH CAROLINA

**JUNE 2017** 

Schedule 3, Purchases Page 1 of 2

Purchased Power	 Total Ca		Capacity	Non-capacity				
Marketers, Utilities, Other	 \$		\$	mWh		Fuel \$		Non-fuel \$
Broad River Energy, LLC.	\$ 6,241,384	\$	5,178,881	11,257	\$	1,062,503		-
City of Fayetteville	923,210		906,675	-		16,535		-
Haywood EMC	29,850		29,850	-		-		-
NCEMC	2,985,220		2,376,935	12,542		608,285		-
PJM Interconnection, LLC.	7,449		-	244		7,449		-
Smurfit Stone Container Corp	16,798		-	553		16,798		-
Southern Company Services	4,251,426		1,097,617	98,228		3,153,809		-
DE Carolinas - Native Load Transfer	3,326,881		-	116,845		3,297,671	\$	29,210
DE Carolinas - Native Load Transfer Benefit	56,207		-	· -		56,207	·	-
DE Carolinas - Fees	255,102		-	-		255,102		-
Energy Imbalance	231			4		139		92
Generation Imbalance	6,427			247		3,393		3,034
	\$ 18,100,185	\$	9,589,958	239,920	\$	8,477,891	\$	32,336
Act 236 PURPA Purchases								
Renewable Energy	\$ 24,516,369		-	350,666	\$	24,516,369		-
DERP Net Metering Excess Generation	2,673		-	62		2,673		-
Other Qualifying Facilities	9,277,284		-	126,299		9,277,284		-
	\$ 33,796,326	\$	<u>-</u>	477,027	\$	33,796,326	\$	_
Total Purchased Power	\$ 51,896,511	\$	9,589,958	716,947	\$	42,274,217	\$	32,336

NOTE: Detail amounts may not add to totals shown due to rounding.

### DUKE ENERGY PROGRESS INTERSYSTEM SALES\* SOUTH CAROLINA

JUNE 2017

Schedule 3, Sales Page 2 of 2

	_	Total Capacit		Capacity				
Sales		\$		\$	mWh	Fuel\$	N	on-fuel \$
Utilities:								
SC Electric & Gas - Emergency	\$	59,700		-	597	\$ 16,932	\$	42,768
Market Based:								
NCEMC Purchase Power Agreement	\$	1,045,515	\$	652,500	10,486	\$ 310,968	\$	82,047
PJM Interconnection, LLC.		61,145		-	1,601	59,417		1,728
Other:								
DE Carolinas - Native Load Transfer Benefit	\$	639,899		-	-	\$ 639,899		-
DE Carolinas - Native Load Transfer		6,781,226		-	315,348	6,414,242	\$	366,984
Generation Imbalance		1		-	-	-		1
Total Intersystem Sales	\$	8,587,486	\$	652,500	328,032	\$ 7,441,458	\$	493,528

<sup>\*</sup> Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

### Duke Energy Progress (Over) / Under Recovery of Fuel Costs June 2017

Schedule 4 Page 1 of 2

Line No.			Total Residential	General Service Non-Demand	Demand	Lighting	Total
1	Actual System kWh sales	Input					5,213,164,766
2	DERP Net Metered kWh generation	Input					312,451
3	Adjusted System kWh sales	L1 + L2				_	5,213,477,217
4	Actual S.C. Retail kWh sales	Input	167,932,120	25,851,439	290,934,409	6,955,739	491,673,707
5	DERP Net Metered kWh generation	Input	165,247	7,858	139,346	0,700,107	312,451
6	Adjusted S.C. Retail kWh sales	L4 + L5	168,097,367	25,859,297	291,073,755	6,955,739	491,986,158
7	Actual S.C. Demand units (kw)	L32 / 31b *100			661,633		
Base fuel c	component of recovery - non-capacity						
8	Incurred System base fuel - non-capacity expense	Input					\$131,328,390
9	Eliminate avoided fuel benefit of S.C. net metering	Input				_	\$10,277
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9				_	\$131,338,667
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					2.519
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$4,234,733	\$651,451	\$7,332,772	\$175,230	\$12,394,186
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$5,507)	(\$556)	(\$4,214)	\$0	(\$10,277)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$4,229,226	\$650,895	\$7,328,558	\$175,230	\$12,383,909
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.229	2.229	2.229	2.229	2.229
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$3,742,416	\$576,229	\$6,484,928	\$155,043	\$10,958,616
17	DERP NEM incentive - fuel component	Input	(\$1,321)	(\$133)	(\$1,011)	\$0	(\$2,465)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$3,741,095	\$576,096	\$6,483,917	\$155,043	\$10,956,151
19	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L18 - L14	\$488,131	\$74,799	\$844,641	\$20,187	\$1,427,758
20	Adjustment - Economic Purchases	Input	\$0	\$0	\$0	\$0	\$0
21	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L19 + L20	\$488,131	\$74,799	\$844,641	\$20,187	\$1,427,758
Base fuel c	component of recovery - capacity						
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.247	0.162			
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100			48		
23	Incurred S.C. base fuel - capacity expense	Input	\$414,365	\$41,804	\$317,022		\$773,191
24a	Billed base fuel - capacity rates by class (¢/kWh)	Input	0.181	0.128			1
24b	Billed base fuel - capacity rate (¢/kW)	Input			30		
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$303,259	\$33,090		\$0	\$543,958
26	S.C. base fuel - capacity (over)/under recovery [See footnote]	L25 - L23	\$111,106	\$8,714	\$109,413	\$0	\$229,233
27	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
28	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	L26 + L27	\$111,106	\$8,714	\$109,413	\$0	\$229,233
Environme	ental component of recovery						
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.034	0.022			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100			7		
30	Incurred S.C. environmental expense	Input	\$57,256	\$5,776	\$43,805		\$106,837
31a	Billed environmental rates by class (¢/kWh)	Input	0.042	0.031			
31b	Billed environmental rate (¢/kW)	Input			6		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$69,982	\$8,014	\$ 39,698		\$117,694
33	S.C. environmental (over)/under recovery [See footnote]	L32 - L30	(\$12,726)	(\$2,238)	\$4,107	\$0	(\$10,857)
34	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
35	Total S.C. environmental (over)/under recovery [See footnote]	L33 + L34	(\$12,726)	(\$2,238)	\$4,107	\$0	(\$10,857)
Distributed	Energy Resource Program component of recovery: avoided costs						
36a	Incurred S.C. DERP avoided cost rates by class (¢/kWh)	L37 / L4 * 100	0.000	0.000			
36b	Incurred S.C. DERP avoided cost rates by class (¢/kW)	L37 / L7 * 100			0.016		
37	Incurred S.C. DERP avoided cost expense	Input	\$135	\$14	\$103		\$252
38a	Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.000	0.000			
38b	Billed S.C. DERP avoided cost rates by class (¢/kW)	Input			0.000		
39	Billed S.C. DERP avoided cost revenue	L38a * L4 /100	\$0	\$0	\$0		\$0
40	S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 - L37	\$135	\$14	\$103	\$0	\$252
41	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
42	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L40 + L41	\$135	\$14	\$103	\$0	\$252

Year 2016-2017

			General Service			
Cumulative (over) / under recovery	Cumulative	Total Residential	Non-Demand	Demand	Lighting	Total
_/2 Balance ending February 2017	7,147,414				-	
March 2017 - actual	9,181,849	\$692,916	\$94,251	\$1,212,327	\$34,941	\$2,034,435
April 2017 - actual	10,666,798	\$433,883	\$61,958	\$966,533	\$22,575	\$1,484,949
May 2017 - actual	9,954,108	(\$176,458)	(\$31,239)	(\$495,676)	(\$9,317)	(\$712,690)
June 2017 - actual	11,600,494	\$586,646	\$81,289	\$958,264	\$20,187	\$1,646,386
July 2017 - forecast	11,836,698	\$36,485	\$9,874	\$185,457	\$4,388	\$236,204
August 2017 - forecast	11,598,393	(\$179,766)	(\$17,860)	(\$37,146)	(\$3,533)	(\$238,305)
September 2017 - forecast	9,945,412	(\$549,872)	(\$58,587)	(\$1,022,620)	(\$21,902)	(\$1,652,981)
October 2017 - forecast	8,438,208	(\$350,248)	(\$70,308)	(\$1,056,817)	(\$29,831)	(\$1,507,204)
November 2017 - forecast	7,047,621	(\$328,097)	(\$60,124)	(\$978,699)	(\$23,667)	(\$1,390,587)
December 2017 - forecast	6,521,557	(\$295,154)	(\$642)	(\$227,919)	(\$2,349)	(\$526,064)
January 2018 - forecast	6,077,346	(\$454,005)	(\$2,756)	\$14,671	(\$2,121)	(\$444,211)
February 2018 - forecast	4,665,755	(\$734,961)	(\$37,267)	(\$623,254)	(\$16,109)	(\$1,411,591)
March 2018 - forecast	4,378,940	(\$83,706)	(\$1,338)	(\$197,767)	(\$4,004)	(\$286,815)
April 2018 - forecast	3,427,195	(\$152,369)	(\$42,336)	(\$737,744)	(\$19,296)	(\$951,745)
May 2018 - forecast	2,656,370	(\$48,739)	(\$42,497)	(\$662,761)	(\$16,828)	(\$770,825)
June 2018 - forecast	2,263,956	(\$28,075)	(\$14,844)	(\$343,943)	(\$5,552)	(\$392,414)

Line No.			Residential	Commercial	Industrial	Total
Distributed	Energy Resource Program component of recovery: incremental costs			•		
44	Incurred S.C. DERP incremental expense	Input	\$83,431	\$42,818	\$29,430	\$155,679
45	Billed S.C. DERP incremental rates by account (\$/account)	Input	0.35	0.70	62.56	
46	Billed S.C. DERP incremental revenue	Input	\$52,368	\$25,403	\$16,632	\$94,403
47	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L46	\$31,063	\$17,415	\$12,798	\$61,276
48	Adjustment	Input	\$0	\$0	\$0	\$0
49	Total S.C. DERP incremental (over)/under recovery [See footnote]	L47 + L48	\$31,063	\$17,415	\$12,798	\$61,276

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_/2 Balance ending February 2017
March 2017 - actual
April 2017 - actual

Year 2016-2017

Cumulative (over) / under recovery	Cumulative	Residential	Commercial	Industrial	Total
_/2 Balance ending February 2017	391,288			-	
March 2017 - actual	371,756	(\$11,829)	(\$3,912)	(\$3,791)	(\$19,532)
April 2017 - actual	379,964	\$3,069	\$3,581	\$1,558	\$8,208
May 2017 - actual	399,483	\$8,882	\$6,936	\$3,701	\$19,519
June 2017 - actual	460,759	\$31,063	\$17,415	\$12,798	\$61,276
July 2017 - forecast	421,641	(\$23,973)	(\$28,946)	\$13,801	(\$39,118)
August 2017 - forecast	401,916	(\$13,530)	(\$23,755)	\$17,560	(\$19,725)
September 2017 - forecast	400,027	(\$4,636)	(\$18,281)	\$21,028	(\$1,889)
October 2017 - forecast	417,739	\$5,777	(\$12,855)	\$24,790	\$17,712
November 2017 - forecast	489,604	\$34,931	\$2,010	\$34,924	\$71,865
December 2017 - forecast	577,845	\$43,796	\$6,368	\$38,077	\$88,241
January 2018 - forecast	598,262	\$8,143	(\$13,008)	\$25,282	\$20,417
February 2018 - forecast	617,998	\$7,658	(\$13,129)	\$25,207	\$19,736
March 2018 - forecast	637,443	\$7,259	(\$13,103)	\$25,289	\$19,445
April 2018 - forecast	656,674	\$7,105	(\$13,043)	\$25,169	\$19,231
May 2018 - forecast	675,282	\$6,826	(\$13,347)	\$25,129	\$18,608
June 2018 - forecast	693,605	\$6,634	(\$13,399)	\$25,088	\$18,323

### Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts. Under collections, or regulatory assets, are shown as positive amounts.

\_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.246 and RECD 5% discount.

\_/2 February 2017 ending balance reflects total adjustments of \$(129,849) pursuant to the docket no. 2017-1-E directive.

	Weatherspoon	Lee	Sutton	Robinson	Asheville	Asheville	Roxboro	Мауо
Description	СТ	CC	CC/CT	Nuclear	Steam	СТ	Steam	Steam
Cost of Fuel Purchased (\$)							<b>.</b>	<b>^</b>
Coal	-	-	-	- (7.4.4)	\$3,827,034	-	\$11,586,156	\$5,157,183
Oil	-	-	-	(711)	2,828	-	422,062	266,309
Gas - CC	-	17,456,907	12,528,668	-	-	-	-	-
Gas - CT	9		549,653		-	421,011	-	<u> </u>
Total	\$9	\$17,456,907	\$13,078,321	(\$711)	\$3,829,862	\$421,011	\$12,008,218	\$5,423,492
Average Cost of Fuel Purchased (¢/MBTU)	)							
Coal	-	-	-	-	324.34	-	321.23	317.06
Oil	-	-	-	-	-	-	1,245.57	1,234.17
Gas - CC	-	410.66	467.63	-	-	-	-	-
Gas - CT	-	-	1,671.03	-	-	430.79	-	-
Weighted Average	-	410.66	482.22	-	324.58	430.79	329.83	329.07
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	\$3,487,661	-	\$21,046,376	\$6,413,028
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	9,499	-	65,548	-	135,537	70	440,170	322,476
Gas - CC	-	17,456,907	12,528,668	-	-	-	-	-
Gas - CT	9	-	549,653	-	-	421,011	-	-
Nuclear	-	-	-	3,966,671	-	-	-	-
Total	\$9,508	\$17,456,907	13,143,869.39	3,966,671	\$3,623,198	\$421,081	\$21,486,546	\$6,735,504
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	306.78	-	314.70	313.75
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	1,507.78	-	2,030.61	-	1,343.81	1,400.00	1,279.94	1,297.85
Gas - CC	-	410.66	467.63	_	-	-	-	-
Gas - CT	_	-	1,671.03	_	_	430.79	_	_
Nuclear	_	_	-	69.31	_		_	_
Weighted Average	1,509.17	410.66	484.06	69.31	315.90	430.84	319.64	325.56
Wolginea / Wolago	1,000.17	110.00	10 1.00	00.01	010.00	100.01	010.01	020.00
Average Cost of Generation (¢/kWh)					2.07		2.00	2.00
Coal	-	-	-	-	3.97	-	3.69	3.88
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	24.22	-	15.92	-	15.37	16.06
Gas - CC	-	3.00	3.31	-	-	-	-	-
Gas - CT	-	-	15.31	- 0.70	-	4.82	-	-
Nuclear Weighted Average	<u> </u>	3.00	3.44	0.73 0.73	4.08	4.82	3.75	4.03
oiginea / trolage		0.00	0	55			00	
Burned MBTU's					4 400 070		0.007.000	0.044.000
Coal	-	-	-	-	1,136,872	-	6,687,800	2,044,020
Oil - CC	-	-	-	-	-		-	-
Oil - Steam/CT	630	-	3,228	-	10,086	5	34,390	24,847
Gas - CC	-	4,250,928	2,679,207	-	-	-	-	-
Gas - CT	-	-	32,893	-	-	97,729	-	-
Nuclear	-		-	5,722,685	-	-	-	-
Total	630	4,250,928	2,715,328	5,722,685	1,146,958	97,734	6,722,190	2,068,867
Net Generation (mWh)								
Coal	-	-	-	-	87,848	-	570,780	165,132
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	(26)	-	271	-	851	-	2,864	2,007
Gas - CC	-	582,823	378,170	-	-	-	-	-
Gas - CT	(17)	-	3,591	-	-	8,739	-	-
Nuclear	-	-	-	544,333	-	-	-	-
Hydro (Total System)								
Solar (Total System)	(42)	502.022	202.022	E44 222	99 600	9 720	F72 C44	167.120
Total	(43)	582,823	382,032	544,333	88,699	8,739	573,644	167,139
Cost of Reagents Consumed (\$)								_
Ammonia	-	-	-	-	-	-	\$118,874	\$29,517
Limestone	-	-	-	-	101,860	-	552,354	214,962
Re-emission Chemical	-	-	-	-	-	-	20,417	-
Sorbents	-	-	-	-	2,896	-	134,152	82,050
Urea -	-	-	-	-	58,896	-	-	
Total	-	-	-	-	163,651	-	825,798	326,529
	Notes:							

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Fuel cost information on this report does not reflect intercompany sharing of fuel-related merger savings between Duke Energy Carolinas and Duke Energy Progress.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

					Smith Engrav			
	Brunswick	Blewett	Wayne County	Darlington	Smith Energy Complex	Harris	Current	Total 12 ME
Description	Nuclear	CT	CT	CT	CC/CT	Nuclear	Month	June 2017
Cost of Fuel Purchased (\$)	11001001	•	•	•	33731			
Coal	-	-	-	_	_	-	\$20,570,373	\$347,915,282
Oil	17,884	_	-	_	_	56,022	764,394	17,469,100
Gas - CC	-	_	-	_	19,510,714	-	49,496,289	556,864,346
Gas - CT	-	-	59,141	294,379	4,044,041	-	5,368,234	119,879,746
Total	17,884	-	\$59,141	\$294,379	\$23,554,755	56,022	\$76,199,290	\$1,042,128,474
Average Cost of Fuel Purchased (¢/MBTU								
Coal	-	-	-	-	-	-	320.75	311.16
Oil	1,743.08	-	-	-	-	1,815.95	1,283.10	1,236.10
Gas - CC	-	-	-	-	370.14	-	405.66	425.47
Gas - CT	-	-	340.58	382.05	370.67	-	407.91	371.42
Weighted Average	1,743.08	-	340.58	382.05	370.23	1,815.95	381.18	377.06
Cost of Fuel Burned (\$)								
Coal	_	-	-	_	_	_	\$30,947,065	\$346,438,189
Oil - CC	_	-	-	_	249	_	249	274,041
Oil - Steam/CT	-	16,918	-	218,506	-	-	1,208,724	17,777,202
Gas - CC	_	-	-	-	19,510,714	_	49,496,289	556,864,346
Gas - CT	_	_	59,141	294,379	4,044,041	-	5,368,234	119,879,746
Nuclear	8,943,461	-	-	-	-	4,732,518	17,642,650	192,999,113
Total	\$8,943,461	\$16,918	\$59,141	\$512,885	\$23,555,004	\$4,732,518	\$104,663,211	\$1,234,232,637
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	-	-	313.59	314.67
Oil - CC	-	-	-	-	1,660.00	-	1,660.00	1,799.83
Oil - Steam/CT	-	1,668.47	-	1,703.62	-	-	1,388.92	1,366.22
Gas - CC	-	-	-	-	370.14	-	405.66	425.47
Gas - CT	-	-	340.58	382.05	370.67	-	407.91	371.42
Nuclear	63.05	-	-	-	-	65.45	65.01	64.44
Weighted Average	63.05	1,668.47	340.58	570.65	370.24	65.45	206.80	215.00
Average Cost of Generation (¢/kWh)								
Coal	_	_	_	_	_	_	3.76	3.34
Oil - CC	_	_	_	_	24.90	_	24.90	52.29
Oil - Steam/CT	_	67.67	_	43.10	-	_	18.60	18.02
Gas - CC	_	-	_	-	2.60	_	2.89	3.03
Gas - CT	_	_	3.71	5.13	4.40	-	4.81	4.22
Nuclear	0.67	_	-	-	-	0.70	0.69	0.68
Weighted Average	0.67	67.67	3.71	8.21	2.80	0.70	1.98	2.03
Burned MBTU's								
Coal	-	-	-	-	-	-	9,868,692	110,097,173
Oil - CC	-	-	-	-	15	-	15	15,226
Oil - Steam/CT	-	1,014	-	12,826	-	-	87,026	1,301,192
Gas - CC	-	-	-	-	5,271,152	-	12,201,287	130,881,428
Gas - CT	-	-	17,365	77,052	1,091,001	-	1,316,040	32,276,031
Nuclear	14,185,230	-	-	-	-	7,230,700	27,138,615	299,493,419
Total	14,185,230	1,014	17,365	89,878	6,362,168	7,230,700	50,611,675	574,064,469
Net Generation (mWh)								
Coal							823,759	10,372,684
Oil - CC	_	_	_	_	1	_	1	524
Oil - Steam/CT		25		507			6,500	98,658
Gas - CC	_	-	_	-	750,504	_	1,711,497	18,396,732
Gas - CT	_	_	1,593	5,741	91,894	_	111,541	2,838,176
Nuclear	1,326,446	_	-	-	-	680,788	2,551,567	28,364,172
Hydro (Total System)	1,020,770	-	-	-	_	000,700	46,026	413,109
Solar (Total System)							24,661	219,510
Total	1,326,446	25	1,593	6,248	842,399	680,788	5,275,551	60,703,565
	, ,		,	•	•	,	, ,	, ,
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	\$26,928	-	\$175,319	\$2,847,084
Limestone	-	-	-	-	-	-	869,176	10,358,150
Re-emission Chemical	-	-	-	-	-	-	20,417	179,759
Sorbents	-	-	-	-	-	-	219,098	3,365,530
Urea .	-	-	-	-	-	-	58,896	1,024,592
Total	-	-	-	-	26,928	-	1,342,906	17,775,116

## Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report June 2017

Schedule 6 Page 1 of 3

Description	Weatherspoon	Lee	Sutton	Robinson	Asheville	
Coal Data:						
Beginning balance	-	-	-	-	144,008	
Tons received during period	-	-	-	-	46,389	
Inventory adjustments	-	-	-	-	-	
Tons burned during period	-	-	-	-	45,150	
Ending balance	-	-	-	-	145,247	
MBTUs per ton burned	-	-	-	-	25.18	
Cost of ending inventory (\$/ton)	-	-	-	-	77.25	
Oil Data:						
Beginning balance	653,807	-	3,160,517	78,040	3,055,801	
Gallons received during period	-	-	-	-	-	
Miscellaneous use and adjustments	(147)	-	-	-	(3,117)	
Gallons burned during period	4,502	-	23,410	-	73,395	
Ending balance	649,158	-	3,137,107	78,040	2,979,289	
Cost of ending inventory (\$/gal)	2.11	-	2.80	2.61	1.85	
Gas Data:						
Beginning balance	-	-	-	-	-	
MCF received during period	-	4,092,938	2,607,466	-	94,512	
MCF burned during period	-	4,092,938	2,607,466	-	94,512	
Ending balance	-	-	-	-	-	
Limestone/Lime Data:						
Beginning balance	-	-	-	-	9,848	
Tons received during period	-	-	-	-	2,492	
Inventory adjustments	-	-	-	-	-	
Tons consumed during period	-	-	-	-	2,347	
Ending balance	-	-	-	-	9,993	
Cost of ending inventory (\$/ton)	-	-	-	-	41.66	

### Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

## Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report June 2017

Schedule 6	
Page 2 of 3	

Description	Roxboro	Мауо	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	1,368,794	542,339	-	-	-
Tons received during period	141,588	63,142	-	-	-
Inventory adjustments	-	-	-	-	-
Tons burned during period	257,811	78,999	-	-	-
Ending balance	1,252,571	526,482	-	-	-
MBTUs per ton burned	25.94	25.87	-	-	-
Cost of ending inventory (\$/ton)	81.62	81.18	-	-	-
Oil Data:					
Beginning balance	440,202	299,015	169,611	793,708	11,981,450
Gallons received during period	245,547	156,364	7,435	-	-
Miscellaneous use and adjustments	(7,450)	(2,588)	-	-	-
Gallons burned during period	248,007	180,327	-	7,221	-
Ending balance	430,292	272,464	177,046	786,487	11,981,450
Cost of ending inventory (\$/gal)	1.77	1.79	2.61	2.34	2.41
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	16,743
MCF burned during period	-	-	-	-	16,743
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	98,071	20,945	-	-	-
Tons received during period	13,988	144	-	-	-
Inventory adjustments	-	-	-	-	-
Tons consumed during period	14,010	5,488	-	-	-
Ending balance	98,049	15,601	-	-	-
Cost of ending inventory (\$/ton)	37.03	36.62	-	-	-

## Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report June 2017

Schedule 6 Page 3 of 3

		Smith Energy		Current	Total 12 ME
Description	Darlington	Complex	Harris	Month	June 2017
Coal Data:					
Beginning balance	-	-	-	2,055,141	1,841,025
Tons received during period	-	-	-	251,119	4,405,690
Inventory adjustments	-	-	-	-	36,131
Tons burned during period	-	-	-	381,960	4,358,546
Ending balance	-	-	-	1,924,300	1,924,300
MBTUs per ton burned	-	-	-	25.84	25.26
Cost of ending inventory (\$/ton)	-	-	-	81.17	81.17
Oil Data:					
Beginning balance	10,028,095	8,141,444	267,440	39,069,130	38,467,333
Gallons received during period	-	-	22,353	431,699	10,240,939
Miscellaneous use and adjustments	-	-	-	(13,302)	(244,653)
Gallons burned during period	92,605	107	4,989	634,563	9,610,655
Ending balance	9,935,490	8,141,337	284,804	38,852,964	38,852,964
Cost of ending inventory (\$/gal)	2.36	2.32	2.61	2.35	2.35
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	74,639	6,116,917	-	13,003,215	157,766,089
MCF burned during period	74,639	6,116,917	-	13,003,215	157,766,089
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	128,864	120,347
Tons received during period	-	-	-	16,624	293,431
Inventory adjustments	-	-	-	-	(10,346)
Tons consumed during period	-	-	-	21,845	279,789
Ending balance	-	-	-	123,643	123,643
Cost of ending inventory (\$/ton)	-	-	-	37.35	37.35
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Schedule 7

# DUKE ENERGY PROGRESS ANALYSIS OF COAL PURCHASED JUNE 2017

	_	OLIANITITY OF			
STATION	TYPE 	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON	
ASHEVILLE	SPOT	-	\$ -	-	
	CONTRACT ADJUSTMENTS	46,389	3,739,815	80.62	
		4/ 200	87,219	- 02.50	
	TOTAL	46,389	3,827,034	82.50	
MAYO	SPOT	_	_	_	
WIATO	CONTRACT	63,142	4,962,333	78.59	
	ADJUSTMENTS	-	194,850	-	
	TOTAL	63,142	5,157,183	81.68	
	, 5				
ROXBORO	SPOT	12,264	953,125	77.72	
	CONTRACT	129,323	10,195,315	78.84	
	ADJUSTMENTS	-	437,716	-	
	TOTAL	141,588	11,586,156	81.83	
ALL PLANTS	SPOT	12,264	953,125	77.72	
	CONTRACT	238,854	18,897,463	79.12	
	ADJUSTMENTS		719,785		
	TOTAL	251,119	\$ 20,570,373	\$ 81.92	

Schedule 8

# DUKE ENERGY PROGRESS ANALYSIS OF COAL QUALITY RECEIVED JUNE 2017

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.47	9.00	12,718	2.15
MAYO	6.35	6.93	12,880	1.67
ROXBORO	6.38	8.73	12,737	1.87

Schedule 9

# DUKE ENERGY PROGRESS ANALYSIS OF OIL PURCHASED JUNE 2017

	ВІ	RUNSWICK		HARRIS		МАУО	R	охвого
VENDOR	Selr	ma Tank Farm	Se	lma Tank Farm	Greens	boro Tank Farm	Greens	boro Tank Farm
SPOT/CONTRACT		Contract		Contract		Contract		Contract
SULFUR CONTENT %		0		0		0		0
GALLONS RECEIVED		7,435		22,353		156,364		245,547
TOTAL DELIVERED COST	\$	17,884	\$	56,022	\$	266,309	\$	422,062
DELIVERED COST/GALLON	\$	2.41	\$	2.51	\$	1.70	\$	1.72
BTU/GALLON		138,000		138,000		138,000		138,000

### Note:

Sampling charges of \$2,828 for the Asheville station and a price adjustment of \$(711) for the Robinson station are excluded.

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## Duke Energy Progress Power Plant Performance Data Twelve Month Summary

July, 2016 - June, 2017 Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	8,143,616	938	99.11	97.79
Brunswick 2	7,133,693	932	87.38	90.18
Harris 1	7,500,283	928	92.26	90.25
Robinson 2	5,586,580	741	86.06	84.80

### Twelve Month Summary July, 2016 through June, 2017 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,289,654	208	70.95	81.11
Lee Energy Complex	1B	1,282,728	207	70.91	85.80
Lee Energy Complex	1C	1,295,530	208	71.04	84.12
Lee Energy Complex	ST1	2,382,584	379	71.83	81.20
Lee Energy Complex	Block Total	6,250,496	1,001	71.29	82.50
Richmond County CC	7	981,427	179	62.51	69.91
Richmond County CC	8	963,904	178	61.74	69.26
Richmond County CC	ST4	1,120,378	172	74.52	72.71
Richmond County CC	9	1,355,779	202	76.67	83.95
Richmond County CC	10	1,372,704	202	77.63	84.15
Richmond County CC	ST5	1,827,035	248	83.98	88.68
Richmond County CC	Block Total	7,621,227	1,182	73.66	79.33
Sutton Energy Complex	1A	1,392,854	210	75.90	89.16
Sutton Energy Complex	1B	1,421,635	210	77.46	90.21
Sutton Energy Complex	ST1	1,718,116	266	73.74	92.94
Sutton Energy Complex	Block Total	4,532,605	685	75.54	90.50

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

# Duke Energy Progress Power Plant Performance Data Twelve Month Summary July, 2016 through June, 2017

### **Intermediate Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	1,931,049	740	29.81	87.07
Roxboro 2	2,134,307	672	36.24	96.20
Roxboro 3	2,337,682	696	38.36	90.75
Roxboro 4	1,622,239	707	26.21	72.89

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Twelve Month Summary July, 2016 through June, 2017 Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville	1	666,635	191	39.85	78.06
Asheville	2	668,854	191	39.98	81.69
Roxboro	1	1,072,822	380	32.26	95.18

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

### Twelve Month Summary July, 2016 through June, 2017 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	195,663	355	88.03
Blewett CT	-226	63	98.54
Darlington CT	110,885	852	89.08
Richmond County CT	2,034,427	871	92.85
Sutton CT	-482	71	97.02
Sutton Fast Start CT	3,902	90	100.00
Wayne County CT	524,908	927	96.23
Weatherspoon CT	-217	152	88.22

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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# Twelve Month Summary July, 2016 through June, 2017 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	81,688	27.0	79.72
Marshall	3,683	4.0	31.18
Tillery	121,286	84.0	93.72
Walters	206,452	113.0	99.09

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.